WOODSTOCK

SHOP FOX®

INTERNATIONAL

MODEL W1668
13¼" Oscillating Drill Press

INSTRUCTION MANUAL

Phone: 1-800-840-8420 • On-Line Technical Support: tech-support@woodstockint.com

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USE THE QUICK GUIDE PAGE LABELS TO SEARCH OUT INFORMATION FAST!

INTRODUCTION

ABOUT YOUR NEW DRILL PRESS

This new Shop Fox® Oscillating Drill Press has been specially designed by Woodstock International, Inc. to provide many years of trouble free service. Close attention to detail, ruggedly built parts and a rigid quality control program assure safe and reliable operation.

The Shop Fox® Model W1668 is a drill press and oscillating sander in one compact machine. It is capable of a wide variety of drilling and sanding operations. A sanding spindle is included for use with drums ranging in size from 1" to 2" diameter and 4 1/4" long. Purchasing drums and sleeves will allow you to sand small or finely detailed pieces and with the oscillating feature, your abrasives will last longer and provide a smoother finish. Included are table inserts to give maximum support for the workpiece and a dust port to connect to your dust collection system. The W1668 is packaged with a drill chuck, chuck key, motor and paddle switch with removable safety key.

Woodstock International, Inc. is committed to customer satisfaction in providing this manual. It is our intent to make sure all the information necessary for safety, ease of assembly, practical use and durability of this product be included.

If you should have any comments regarding this manual, please feel free to contact us at:

Woodstock International, Inc.
P.O. Box 2309
Bellingham, WA 98227

WOODSTOCK SERVICE AND SUPPORT

We stand behind our machines! In the event that a defect is found, parts are missing or questions arise about your machine, please contact Woodstock Service and Support at:

1-360-734-3482
or
tech-support@woodstockint.com.

Our knowledgeable staff will help you troubleshoot problems, send out parts or arrange warranty returns.

WARRANTY AND RETURNS

Woodstock International, Inc. warrants all SHOP FOX® machinery to be free of defects from workmanship and materials for a period of 2 years from the date of original purchase by the original owner. This warranty does not apply to defects due directly or indirectly to misuse, abuse, negligence or accidents, lack of maintenance, or to repair or alterations made or specifically authorized by anyone other than Woodstock International, Inc.

Woodstock International, Inc. will repair or replace, at its expense and at its option, the SHOP FOX® machine or machine part which in normal use has proven to be defective, provided that the original owner returns the product prepaid to the SHOP FOX® factory service center or authorized repair facility designated by our Bellingham, WA office, with proof of their purchase of the product within 2 years, and provides Woodstock International, Inc. reasonable opportunity to verify the alleged defect through inspection. If it is determined there is no defect, or that the defect resulted from causes not within the scope of Woodstock International Inc.'s warranty, then the original owner must bear the cost of storing and returning the product.

This is Woodstock International, Inc.'s sole written warranty and any and all warranties that may be implied by law, including any merchantability or fitness, for any particular purpose, are hereby limited to the duration of this written warranty. We do not warrant that SHOP FOX® machinery complies with the provisions of any law or acts. In no event shall Woodstock International, Inc.'s liability under this warranty exceed the purchase price paid for the product, and any legal actions brought against Woodstock International, Inc. shall be tried in the State of Washington, County of Whatcom. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products.

Every effort has been made to ensure that all SHOP FOX® machinery meets high quality and durability standards. We reserve the right to change specifications at any time because of our commitment to continuously improve the quality of our products.

Machine Specifications

Capacities:

Oscillating Stoke Length	3/4"
Spindle Travel	3 1/4"
Max. Distance, Spindle to Base	24"
Max. Distance, Spindle to Table	17 1/4"
Spindle Taper	B-16
Swing	13 1/4"
Chuck Size	5/8" (13mm), keyed
Speeds	12, Belt Controlled
Range of Speeds	250, 330, 380, 500, 590, 640, 980, 1530, 1600, 1870, 2580, 3050 RPM
Drilling Capacity	3/4" Diameter in Steel

Motor:

Type	TEFC Capacitor Start Induction
Horsepower	3/4 HP
Phase / Cycle	Single Phase / 60 Hz
Voltage	110V
Amps	9
RPM	1720
Power Transfer	V-Belt Drive
Bearings	Shielded & Lubricated Ball Bearings
Switch	Toggle ON/OFF Switch, w/ Safety Lock Tab

SAFETY FIRST!

READ MANUAL BEFORE OPERATING MACHINE
FAILURE TO FOLLOW INSTRUCTIONS BELOW WILL RESULT IN PERSONAL INJURY

⚠DANGER Indicates an imminently hazardous situation which, if not avoided, WILL result in death or serious injury.

⚠WARNING Indicates a potentially hazardous situation which, if not avoided, COULD result in death or serious injury.

⚠CAUTION Indicates a potentially hazardous situation which, if not avoided, MAY result in minor or moderate injury. It may also be used to alert against unsafe practices.

NOTICE This symbol is used to alert the user to useful information about proper operation of the equipment.

1. **Thoroughly read the instruction manual before operating your machine.** Learn the applications, limitations and potential hazards of this machine. Keep manual in a safe, convenient place for future reference.

2. **Keep work area clean and well lighted.** Clutter and inadequate lighting invite potential hazards.

3. **Ground all tools.** If a machine is equipped with a three-prong plug, it must be plugged into a three-hole electrical outlet or grounded extension cord. If using an adapter to aid in accommodating a two-hole receptacle, ground using a screw to a known ground.

4. **Wear eye protection at all times.** Use safety glasses with side shields or safety goggles, meeting the national safety standards, while operating this machine.

5. **Avoid dangerous environment.** Do not operate this machine in wet or open flame environments. Airborne dust particles could cause an explosion and severe fire hazard.

6. **Ensure all guards are securely in place** and in working condition.

7. **Make sure switch is in the "OFF" position** before connecting power to machine.

8. **Keep work area clean;** free of clutter, grease, etc.

9. **Keep children and visitors away.** All visitors should be kept a safe distance away while operating unit.

10. **Childproof workshop** with padlocks, master switches or by removing starter keys.

11. **Disconnect machine when cleaning, adjusting or servicing.**

12. **Do not force tool.** The machine will do a safer and better job at the rate for which it was designed.

13. **Use correct tool.** Do not force machine or attachment to do a job for which it was not designed.

14. **Wear proper apparel.** Do not wear loose clothing, neck ties, gloves, jewelry, etc.

15. **Remove adjusting keys and wrenches.** Before turning the machine on, make it a habit to check that all adjusting keys and wrenches have been removed.

16. **Use proper extension cord.** When using an extension cord, make sure it is in good condition. When extension cord is 100' and less in length, use those that are rated Hard Service (grade S) or better, and that have a conductor size of 16 A.W.G. A drop in line voltage, loss of power and overheating can result when using an undersized cord. The extension cord should have a ground wire and ground plug pin, as well.

17. **Keep proper footing and balance** at all times.

18. **Do not leave machine unattended.** Wait until it comes to a complete stop before leaving the area.

19. **Perform machine maintenance and care.** Follow lubrication and accessory attachment instructions in the manual.

20. **Keep machine away from open flame.** Operating machines near pilot lights and/or open flames creates a high risk if dust is dispersed in the area. Dust particles and an ignition source may cause an explosion. Do not operate the machine in high risk areas, including but not limited to, those mentioned above.

Additional Safety Instructions For Drill Presses

1. **Always operate your drill press at speeds** that are appropriate for the drill bit size and the material that you are drilling.

2. **Feed the drill bit evenly into the workpiece.** Back the bit out of deep holes and clear the chips with a brush after you have turned the machine off.

3. **Make sure the drill bit you are using is tightened properly.** Use only round, hex or triangular shank drill bits.

4. **Never do maintenance or change speeds with this machine plugged in.**

5. **Never use tools that are in poor condition.** Cutting tools that are dull or damaged are difficult to control and may cause serious injury.

6. **Never drill sheet metal** unless it is clamped securely to the table.

7. **Work should be positioned** in such a way as to avoid drilling into the table.

8. **A face guard used with safety glasses is recommended.**

9. **Always clamp workpiece securely to table before drilling.** Never hold a workpiece by hand while drilling.

10. **Always remove handles before using oscillating feature.**

11. **Habits – good and bad – are hard to break.** Develop good habits in your shop and safety will become second-nature to you.

ELECTRICAL REQUIREMENTS

110V Operation

The Shop Fox® W1668 13¼" Oscillating Drill Press can only be operated at 110 volts. The motor supplied with your new drill press is rated at ¾ horse power and will draw approximately 9 amps. When choosing an outlet for this machine, consider using one with a 15 amp circuit breaker or fuse. Keep in mind that a circuit being used by other machines or tools at the same time will add to the electrical load being applied by the drill press. Add up the load ratings of all machines on the circuit. If this number exceeds the rating of the circuit breaker or fuse, use a different outlet.

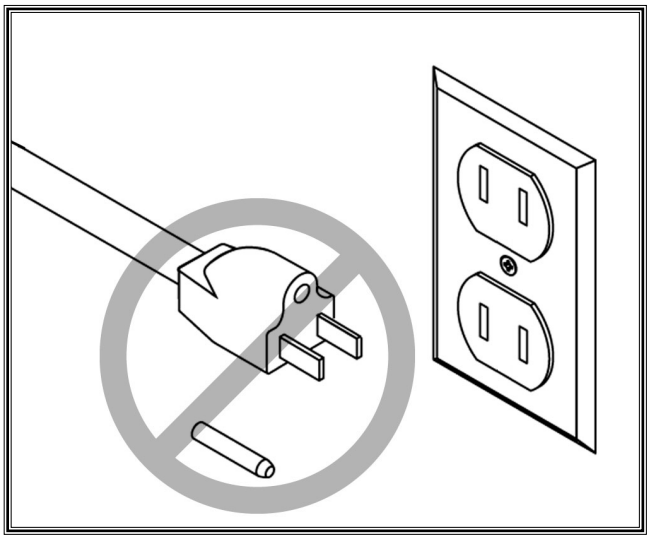
⚠WARNING

This equipment must be grounded. Verify that any existing electrical outlet and circuit you intend to plug into is actually grounded. If it is not, it will be necessary to run a separate 12 A.W.G. copper grounding wire from the outlet to a known ground. Under no circumstances should the grounding pin from any three-pronged plug be removed. Serious injury may occur.

Extension Cords

When it is necessary to use an extension cord, use the following guidelines:

- **Use cords rated for Hard Service**
- **Never exceed a length of 100 feet**
- **Use cords with 14 ga. wire or bigger**
- **Insure cord has a ground wire and pin**
- **Do not use cords in need of repair**



Grounding

This machine must be grounded! **See Figure 1.** The electrical cord supplied with the Shop Fox® W1668 comes with a grounding pin. Do not remove it. If your outlet does not accommodate a ground pin, have it replaced by a qualified electrician or have an appropriate adapter installed with a proven ground source. An adapter does not ensure a grounded system if the adapter is not grounded.

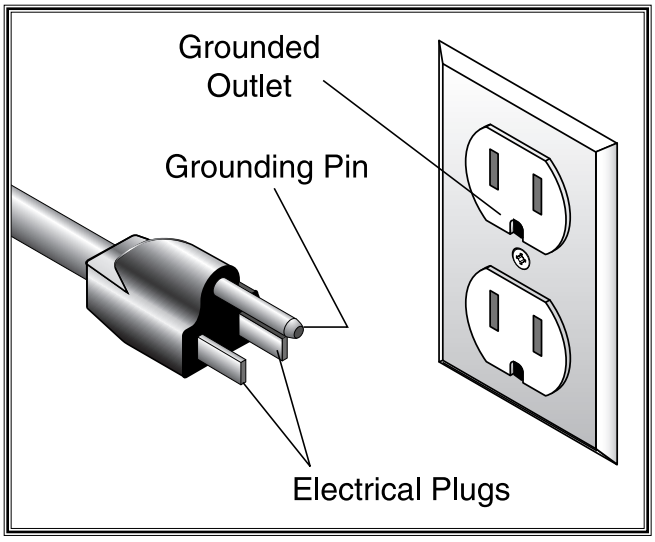


Figure 1. Typical 110V 3-prong plug and outlet.

AVOIDING POTENTIAL INJURIES

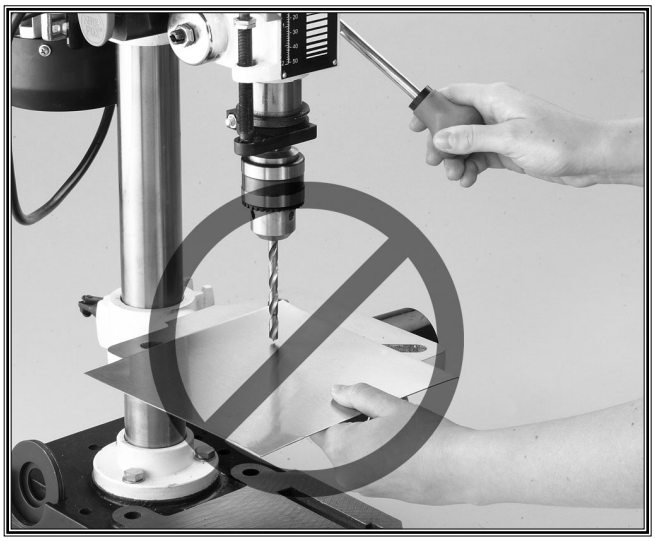


Figure 2. Never drill, holding workpiece by hand.

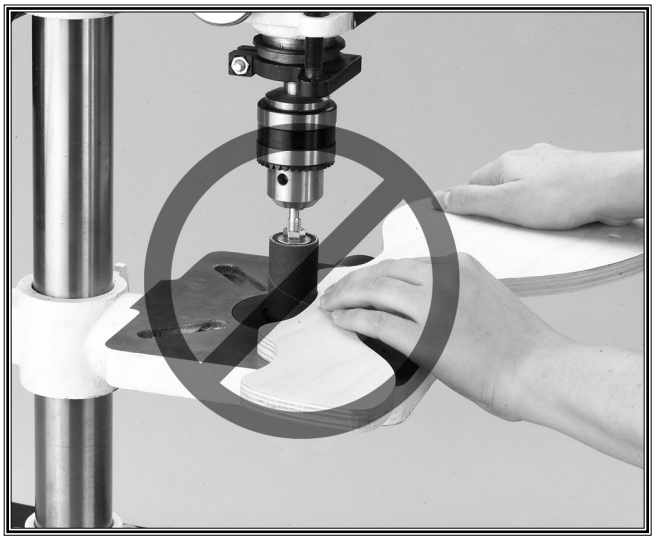


Figure 3. Keep fingers away from spinning tool.

Fig. 4. Remove Switch Safety Key when not in use.

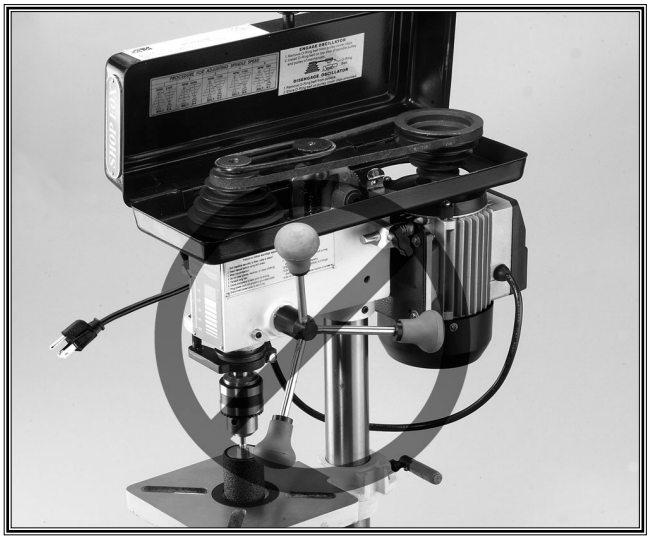


Figure 5. Remove handles when using oscillating mode.

ASSEMBLY INSTRUCTIONS

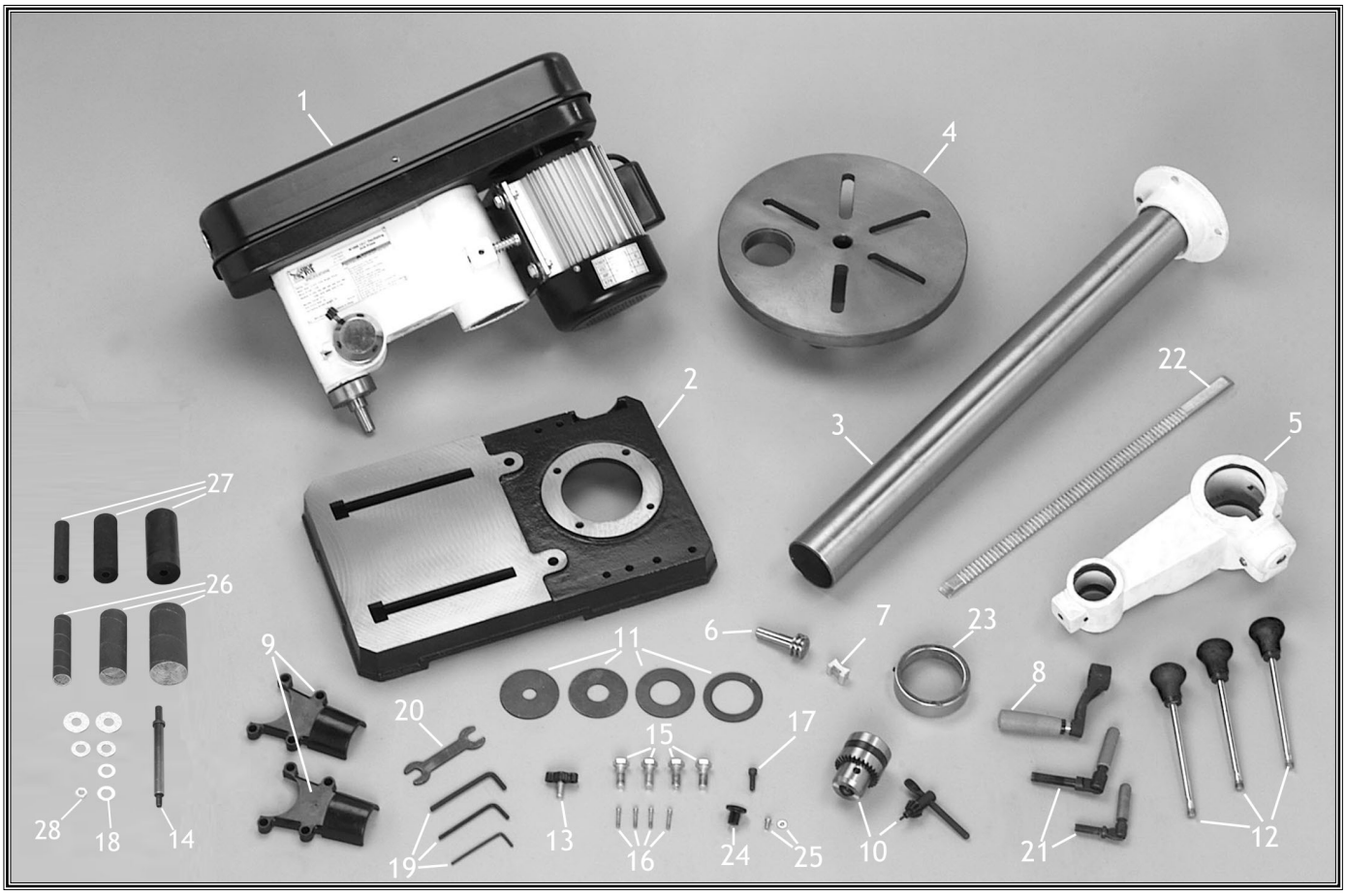


Figure 6. Components laid out for identification.

The following is a description of the components shipped with the Shop Fox® W1668 Oscillating Drill Press. It is recommended that the components be laid out in a similar fashion to those in **Figure 6**. This will help in identification before beginning assembly. Should any part be missing, examine the packaging carefully and check under the belt guard. If any key parts are missing call Woodstock International at 360-734-3482 or at tech-support@woodstockint.com.

1. **Headstock Assembly**
2. **Base**
3. **Column**
4. **Table**
5. **Table Bracket**
6. **Pinion Gear**
7. **Clamp Shoe**
8. **Hand Crank**
9. **Dust Port**
10. **Drill Chuck and Key**
11. **Table Inserts (4)**
12. **Spindle Handles (3)**
13. **Belt Tension Lock Knob**
14. **Sanding Mandrel**
15. **Hex Head Bolts (4)**
16. **Phillips® Head Screws (4)**
17. **Cap Screw**
18. **Mandrel Washers (4)**
19. **Allen® Wrenches (3)**
20. **Open End Wrench**
21. **Lock Handles (2)**
22. **Rack**
23. **Rack Ring**
24. **Belt Cover Knob**
25. **Machine Screw w/ Washer**
26. **Sanding Sleeves**
27. **Sanding Drums**
28. **Mandrel Nut**

ASSEMBLY

While the main components of the Shop Fox® W1668 Oscillating Drill Press are assembled at the factory, some assembly is required. The following is the recommended sequence best suited for final assembly.

TOOLS REQUIRED: You will need a 10mm, 12mm and 14mm open end wrench, a flat tipped screwdriver, a Phillips® screwdriver (not supplied) and a 3mm, 4mm and 5mm Allen® wrench (supplied).

⚠WARNING

Wear safety glasses during the entire assembly process. Failure to comply may result in serious personal injury.

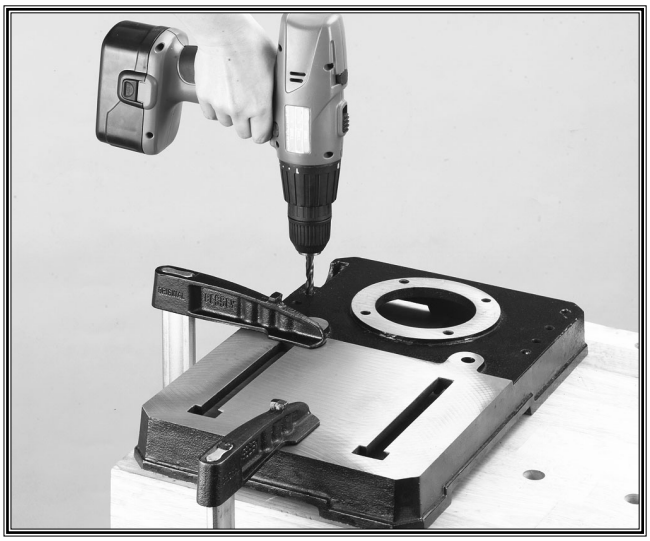
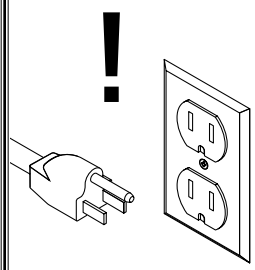


Figure 7. Using holes in base as drill guide.

Figure 8. Installing the dust port.

Base/Column



⚠WARNING

Do not connect the machine to power at this time. The drill press must remain unplugged throughout the entire assembly process. Failure to do this may result in serious personal injury.

1. Ensure machine is unplugged before beginning assembly!

2. Place base on a stable work bench. Make sure the work bench will handle the weight of the drill press and workpiece.

3. It is recommended that the base be secured to the bench. Otherwise a tipping hazard will exist.

4. Clamp the base to the table once a suitable location is found. Use $^{5}/_{16}$" lag bolts or through bolts with washers, lock washers and nuts. Use the mounting holes in the base as a drill guide. **Figure 7.**

5. Place the column on the base and line up the 4 mounting holes. Secure tightly with the M10-1.5 x 25mm hex head bolts using open end wrench provided.

Dust Port

The two-piece dust port is assembled to the bottom of the table using the four M4- 0.7 x 22mm Phillip® head screws. **Figure 8.**

Table Support

1. Thread the 12mm table lock handle 3 turns into the table support bracket.

2. Insert the pinion into the hole on the side of the table support bracket from the inside, starting with the pinion shaft. **Figure 9.** Align setscrew in crank handle with flat, **Figure 10,** on pinion shaft and secure using the 3mm Allen® wrench provided.

3. Insert the lock shoe into the table support bracket and secure with setscrews on either side. **Figure 11.**

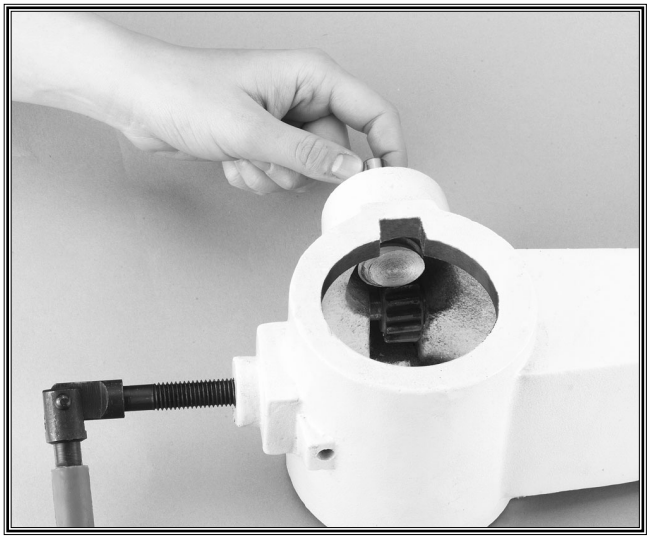


Figure 9. Insert the pinion gear from the inside.

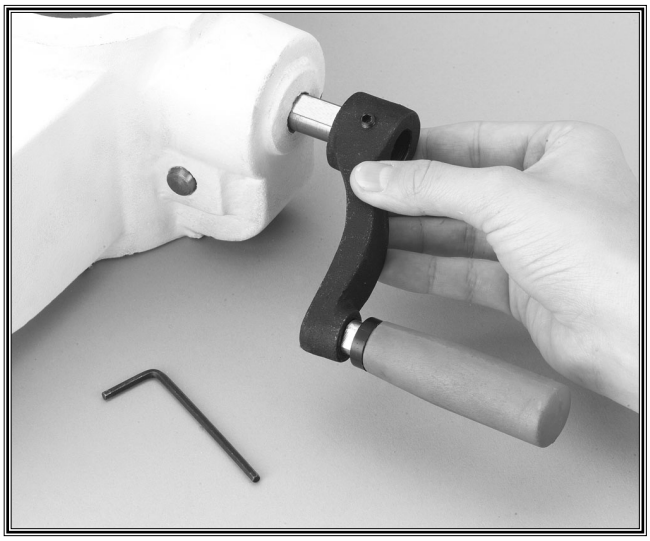


Figure 10. Align setscrew with flat on pinion.

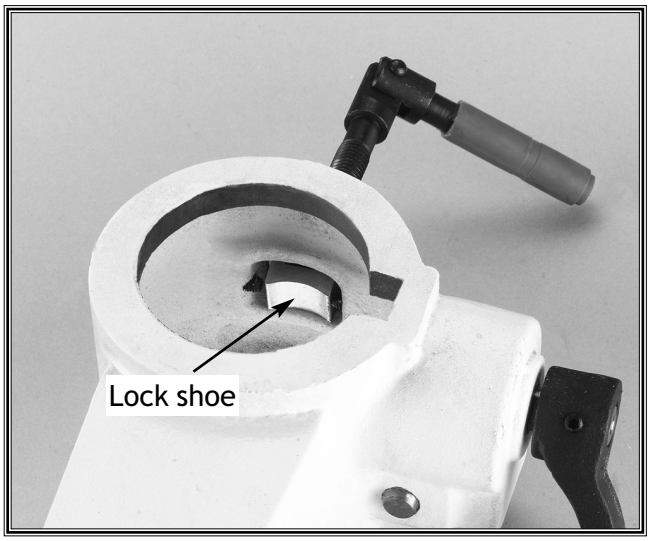


Figure 11. Lock shoe Inserted into table bracket.

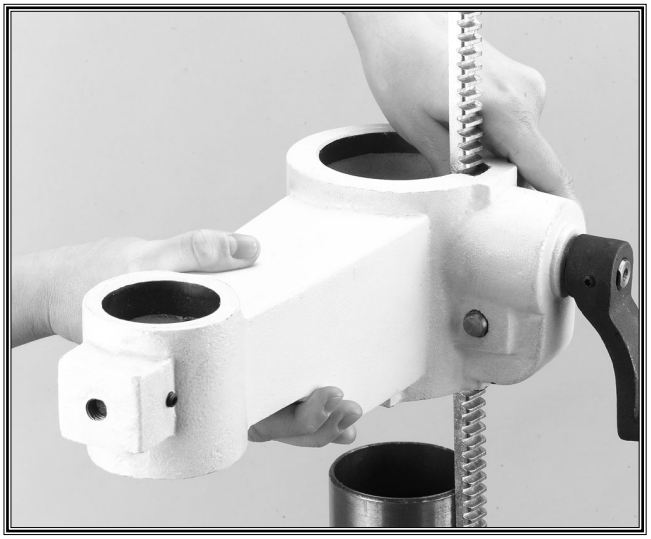


Figure 12. Hold rack in position while installing.

Figure 13. Inside bevel in the correct position.

Table Support, Cont.

4. **Examine the rack and note that the gear teeth extend further on one end than the other.** Insert the rack into the table support bracket and align with pocket. The end of the rack where the gear teeth are closest to the end should be positioned down when the support bracket is oriented as in **Figure 12.** The gear teeth on the rack must also face out.

5. Slide the table support bracket onto the column while holding the rack in place. Allow the bracket to go down until the bottom of the rack contacts the shoulder on the column support. Secure the table with the lock handle.

6. Slide the column ring onto the column with the inside bevel in the down position. **Figure 13.** Adjust the ring until the tip of the rack fits inside the bevel. Tighten the setscrew on the ring. **Do not over tighten.**

Use caution when tightening set screw. Over tightening will split column ring.

Figure 14. Lock shoe in place and secured.

Mounting Table

1. Thread the 10mm lock handle into the table bracket.

2. Insert the lock shoe into the table support bracket and secure with setscrews on either side. Refer to **step 3** under heading **Table Support** if needed.

3. Align the shaft under the table with the hole on the end of the table support bracket. **Figure 14.**

HeadStock

⚠CAUTION

The headstock represents a heavy load. Seek assistance before beginning this step.

1. The bottom of the headstock has a pocket for inserting the column. Position the pocket over the column, as in **Figure 15.** Allow the headstock to slide down until it stops (approximately 3½").

2. Align the headstock directly over the foot of the base by using a plumb bob. Lay a measuring tape or ruler across the drill press base and find its center. Suspend the plumb line from the center of the headstock label as in **Figure 16** and lower the bob until it is near the tape/ruler. Adjust headstock from side to side until the tip is equidistant from the left and right sides.

3. Tighten the two setscrews in **Figure 17** to secure the headstock to the column.

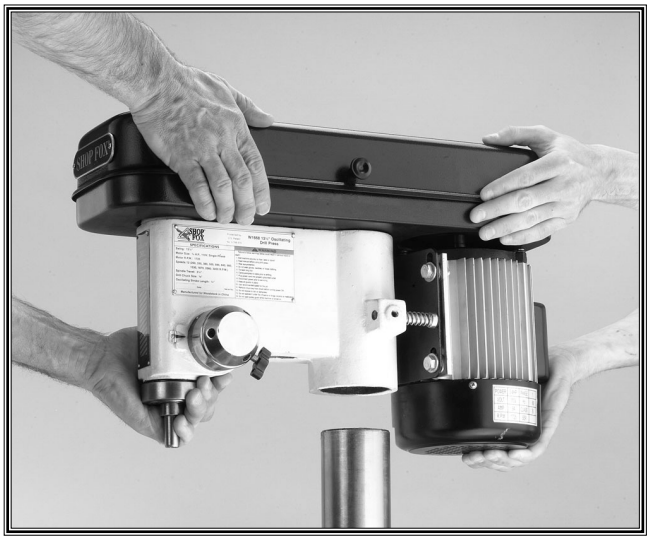


Figure 15. Align pocket in headstock with column.

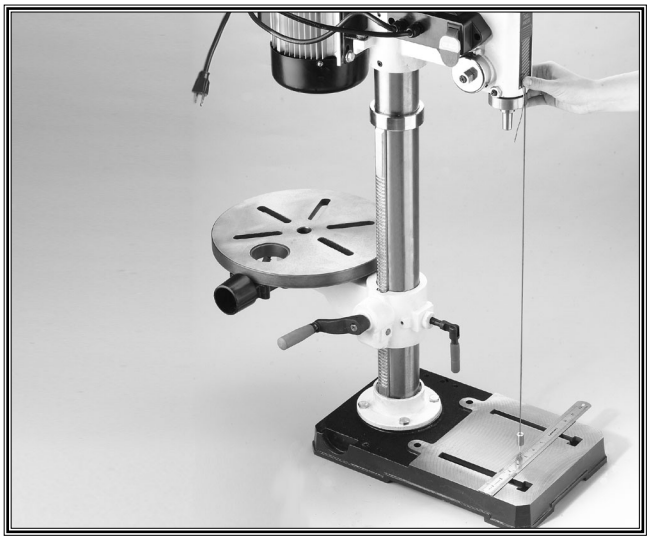


Figure 16. Align headstock with base.

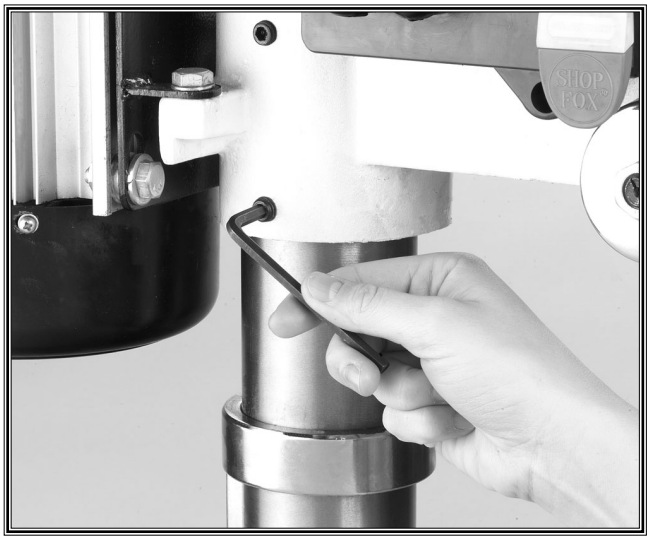


Figure 17. Tighten setscrews to secure headstock.

Figure 18. Jaws adjusted inside chuck body.

Figure 19. Securing drill chuck with screw.

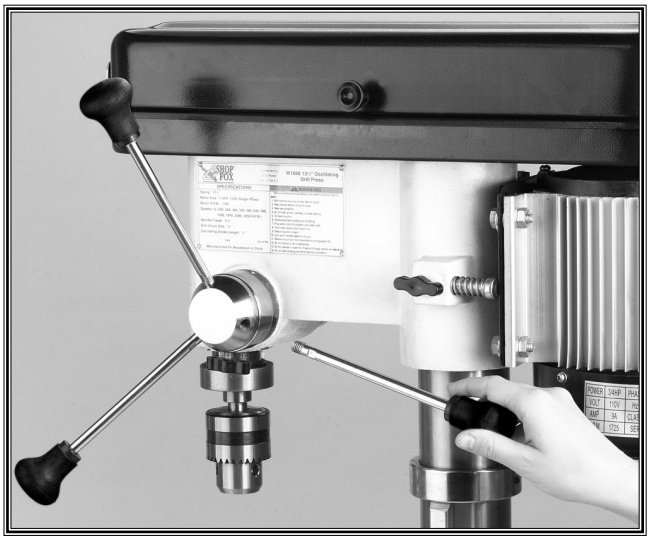


Figure 20. Spindle handle installation.

Drill Chuck

The drill chuck is attached to the drill spindle by means of matched tapers and screw. To mount the drill chuck to the spindle, carefully follow the instructions below:

1. The drill chuck and spindle must be thoroughly cleaned before assembly. It is recommended that mineral spirits be used for this task. Refer to the safety warnings on the container. Failure to clean the mating surfaces may result in separation and wear.

2. Use the chuck key provided to adjust the jaws of the chuck until they are well inside the drill chuck body. **Figure 18.**

DO NOT use a hammer on the drill chuck to seat it onto the spindle. Damage will occur to the oscillating mechanism.

3. Place the drill chuck on the spindle. Insert the Allen® head cap screw into the hole of the drill chuck as in **Figure 19.** Tighten the screw. The drill chuck should be seated securely on the spindle at this time and should be checked for looseness. If the chuck fails to remain secure on the spindle, repeat step **1** and **2.**

Handles

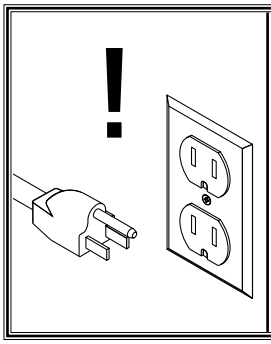
Three handles are supplied with your new Oscillating Drill Press. Thread them into the hub as in **Figure 20.**

⚠CAUTION

Unplug machine and remove handles before using the oscillating feature. Handles swing during oscillating operation.

ADJUSTMENTS

Speed Change



⚠WARNING

Unplug the drill press before changing speeds to avoid accidental start up. Failure to do this may result in serious personal injury.

Unplug the drill press before changing speeds. The Oscillating Drill Press has 12 speeds ranging from 250 to 3050 RPM. There is a speed chart located under the belt guard and one on the following page. Refer to the speed chart while reading these instructions.

1. Loosen the belt tension lock knob. **Figure 21.**

2. The motor is now free to move and can be pulled toward the front of the drill press. This will take tension off the V-belts.

3. Locate the desired speed on the chart and move the V-belts to the desired V-grooves on the motor, idler and spindle pulleys. **Figure 22.**

4. Push the motor toward the back of the headstock, the motor support rod is spring loaded and will follow the motor. **Figure 23.** Tighten the lock knob.

5. Close the cover. **The motor will not start until the cover is closed.**

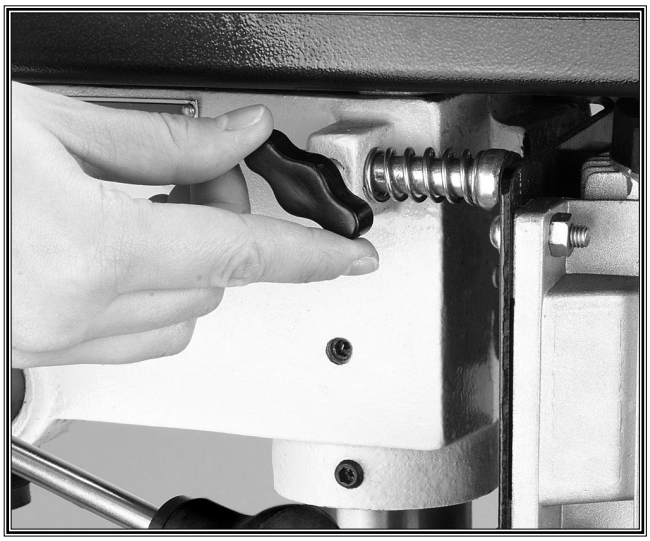
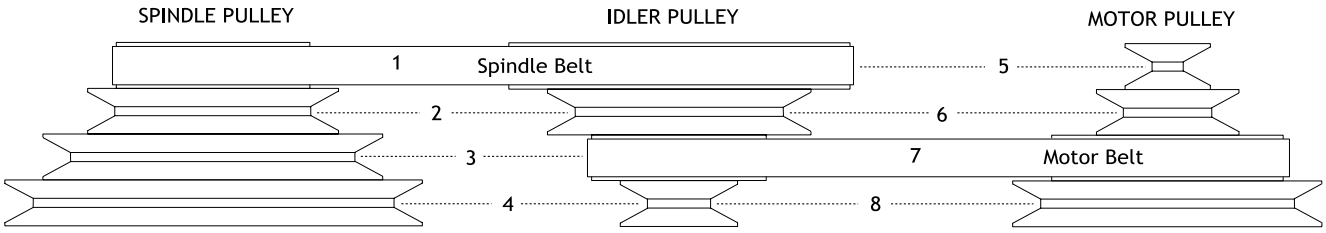


Figure 21. Loosening lock knob

Figure 22. Adjusting belt to desired speed.

Figure 23. Push motor toward back of machine.

More About Speed Change



4-5 250	4-6 330	3-5 380	3-6 500
2-5 590	4-7 640	1-6 980	2-6 1530
2-8 1600	1-7 1870	2-8 2580	1-8 3050

The speed chart above is included to help illustrate belt changes necessary to produce a desired speed. Select the proper speed for the job at hand and find it on the speed chart above. Move the belts to the indicated location on the chart. The belt setting in the example above shows the belt in the #1 spindle pulley position and the belt is in the #7 motor pulley location. This will produce a speed of 1,870 RPM.

Figure 24. Loosening collar lock knob.

Figure 25. Actual stop depth being measured.

Spindle Adjustments

Your new drill press comes fitted with a depth stop for use when drilling. Follow the instructions below for use.

1. Loosen the depth collar lock knob. **Figure 24.**

2. Rotate the depth collar to the desired depth indicated by the scale on the collar. Secure the collar with the lock knob.

3. Test the depth stop by measuring how far the spindle actually moves when the handles are rotated. **Figure 25.** Make adjustment using step **1** and step **2** if needed.

The depth stop for drilling must be adjusted before using the oscillating feature. If the depth stop is left adjusted for a shallow hole, damage will occur to the oscillating mechanism. Loosen the depth collar lock knob and rotate the collar until the scale indicates 3". Tighten the lock knob.

Oscillating Feature

One of the great features of the W1668 Drill Press is its capability for oscillating sanding. The drill press can be converted from drilling operations to sanding operations in just a few steps.

1. **Unplug the drill press and remove the spindle handles.**

2. Install the round rubber belt onto the top groove in the spindle pulley and the oscillating pulley located between the idler pulley and the spindle pulley. The belt will stretch for this purpose. **Figure 22.**

4. Remove the 3 spindle handles. If left in place, the operator may be struck by them while the spindle travels up and down.

3. Close the cover. **The motor will not start until the cover is closed.**

4. Loosen the knob for depth stop.

If the depth stop is left adjusted for a shallow hole, damage will occur to the oscillating mechanism. Check and adjust depth stop before using oscillating feature.

Figure 26. Stretch the belt to fit on pulleys.

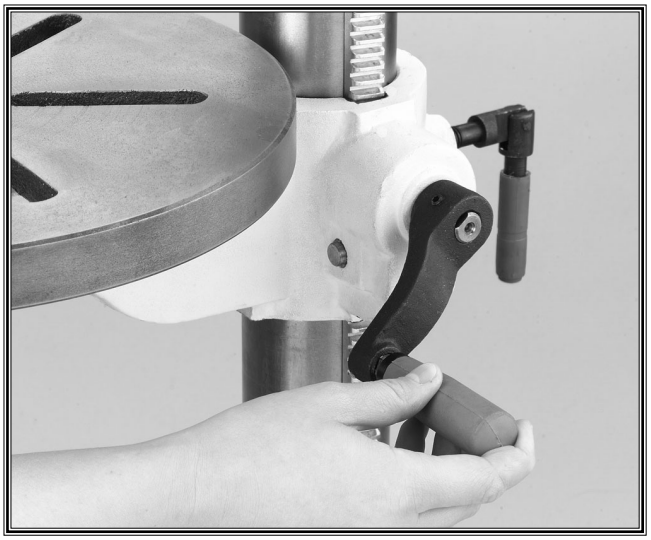


Figure 27. Use handle to adjust table height.

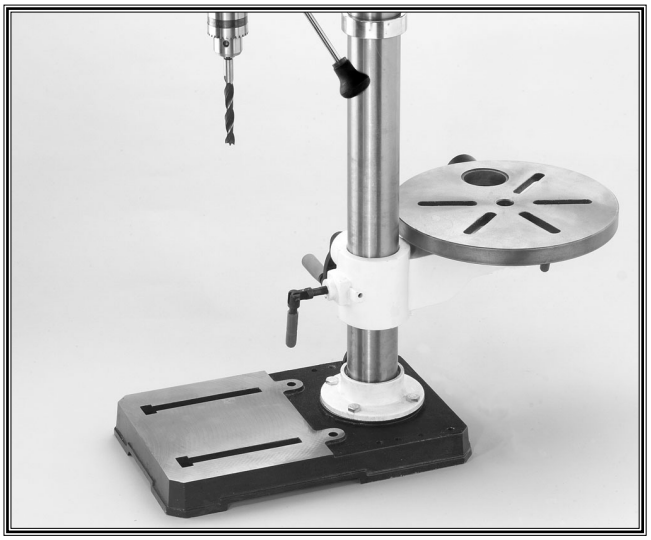


Figure 28. Table adjusted behind column.

Figure 29. Checking drum size and table insert.

Table Adjustments

The table can be adjusted to accommodate height of materials to be sanded or drilled. To adjust:

1. Loosen the table support bracket lock knob. Turn the table hand crank to raise or lower the table. **Figure 27.**

2. The table can be adjusted out of the way so the base of the drill press may be used to support the workpiece **for drilling operations only.** Loosen the table lock knob and pivot the table to the back side of the column. **Figure 28.**

3. The drill press is supplied with 4 table inserts. Always choose the insert whose opening is only slightly bigger than the sanding drum chosen. **Figure 29.** For drilling, always use the table insert with the smallest opening unless using a vise. Install the chosen table insert into the pocket provided in the top of the table.

4. The table should be adjusted so the opening in the installed table insert is centered to the drill bit or sanding drum. Loosen the table and pivot the table until the bit or drum is centered with the hole.

A table insert is not needed when sanding with a 2" drum.

Sanding Tip: To use all of the grit on the paper, adjust the table height as the paper wears. When the thickness of the workpiece does not allow much table movement, remove the drum from the sanding spindle, turn it end for end and replace it on the sanding spindle.

⚠WARNING

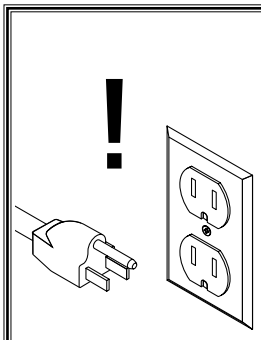
Never sand or drill without the table for support and workpiece properly secured. Serious personal injury may occur.

OPERATIONS

Test Run

Once assembly is complete and adjustments are done to your satisfaction, you are ready to test run the machine.

Make sure the starting switch is off. The paddle is down when off. Make sure all the fasteners and lock handles are tight. Plug in the power cord. Pull the START paddle. Make sure that your finger is poised over the paddle,as in **Figure 30,** just in case there is a problem. The drill press should run smoothly, with little or no vibration or rubbing noises. Strange or unnatural noises require you to stop the machine, investigate and correct before continuing. If source of unusual noise or vibration is not readily apparent, contact our service department for help at 360-734-3482 or: tech-support@woodstockint.com.



⚠WARNING

DO NOT attempt to investigate or adjust the machine while it is running. Wait until the machine is turned off, unplugged and all working parts have come to a stop before proceeding!

⚠WARNING

Always wear safety glasses when operating drill press. Failure to comply may result in serious personal injury.

Figure 30. Hand poised over stop paddle.

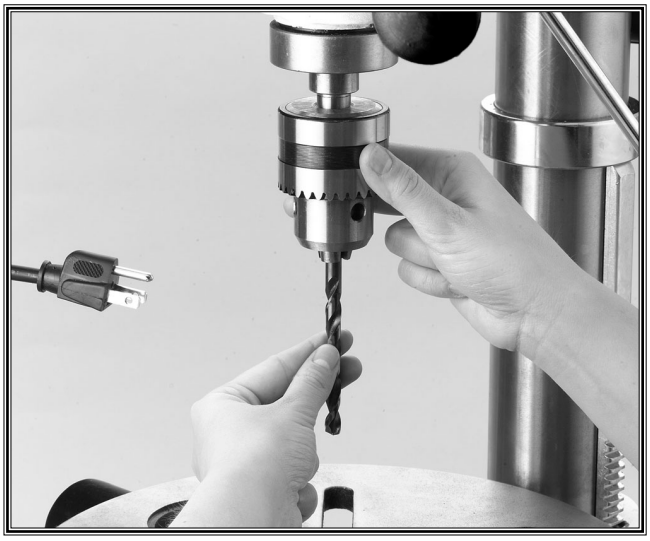


Figure 31. Installing bit.

Drill Changes

Care must be taken to secure the bit firmly in the drill chuck. When changing bits, proceed as follows:

1. Disconnect the machine from the power source.

2. Open the chuck wide enough to accept a drill bit.

3. Install the bit so the chuck jaws will grab as much of the bit shank as it can. **Figure 31.** Do not allow the chuck to grab the fluted body of the drill bit. Make sure small drill bits do not get trapped between the edges of two jaws.

Figure 32. Chuck key engaged.

4. Tighten the chuck with the chuck key using any of the three key end locations. **Figure 32.**

5. Remove the chuck key and reconnect to the power source.

6. Reverse steps to remove the drill bit.

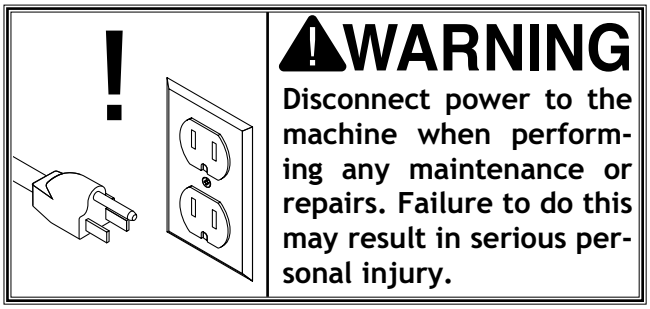
⚠WARNING

Never drill or sand without the table for support and workpiece properly secured. Serious personal injury may occur.

Installing the sanding drum spindle is identical to installing a drill bit. **However,** it is important to install the paper and drum before installing the spindle into the drill chuck. See your local retailer for drums and paper.

MAINTENANCE

General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WARNING
Disconnect power to the machine when performing any maintenance or repairs. Failure to do this may result in serious personal injury.

Regular periodic maintenance on your Model W1668 Oscillating Drill Press will ensure its optimum performance. Make a habit of inspecting your drill press each time you use it. Check for the following conditions and repair or replace when necessary.

1. Loose mounting bolts.
2. Worn switch.
3. Worn or damaged cords and plugs.
4. Damaged V-belt.
5. Any other condition that could hamper the safe operation of this machine.

Table And Base

Tables can be kept rust-free with regular applications of products like Boeshield® T-9. For long term storage you may want to consider products like Kleen Bore's Rust Guardit™.

Lubrication

Since all bearings are shielded and permanently lubricated, simply leave them alone until they need to be replaced. Do not lubricate them.

For other items on this machine, such as the quill, table and column, an occasional shot of light machine oil is all that is necessary. Before applying lubricant, clean off sawdust and metal chips.

Your goal is to achieve adequate lubrication. Too much lubrication will attract dirt and sawdust. Various parts of your machine could loose their freedom of movement as a result.

CLOSURE

The following pages contain general machine data, parts diagrams/lists and warranty/return information for your Shop Fox® Model W1668 Drill Press.

If you need parts or help in assembling your machine, or if you need operational information, we encourage you to call our Service Department. Our trained service technicians will be glad to help you.

If you have comments dealing specifically with this manual, please write to us using the address in the General Information. The specifications, drawings, and photographs illustrated in this manual represent the Model W1668 as supplied when the manual was prepared. However, due to Woodstock International, Inc.'s policy of continuous improvement, changes may be made at any time with no obligation on the part of Woodstock International, Inc. Whenever possible, though, we send manual updates to all owners of a particular tool or machine that have registered their purchase with our warranty card. Should you receive one, add the new information to this manual and keep it for reference.

We have included some important safety measures that are essential to this machine's operation. While most safety measures are generally universal, we remind you that each workshop is different and safety rules should be considered as they apply to your specific situation.

We recommend you keep this manual for complete information regarding Woodstock International, Inc.'s warranty and return policy. Should a problem arise, we recommend that you keep proof of purchase with your manual. If you need additional technical information relating to this machine, or if you need general assistance or replacement parts, please contact the Service Department at 1-360-734-3482.

Additional information sources are necessary to realize the full potential of this machine. Trade journals, woodworking magazines, and your local library are good places to start.

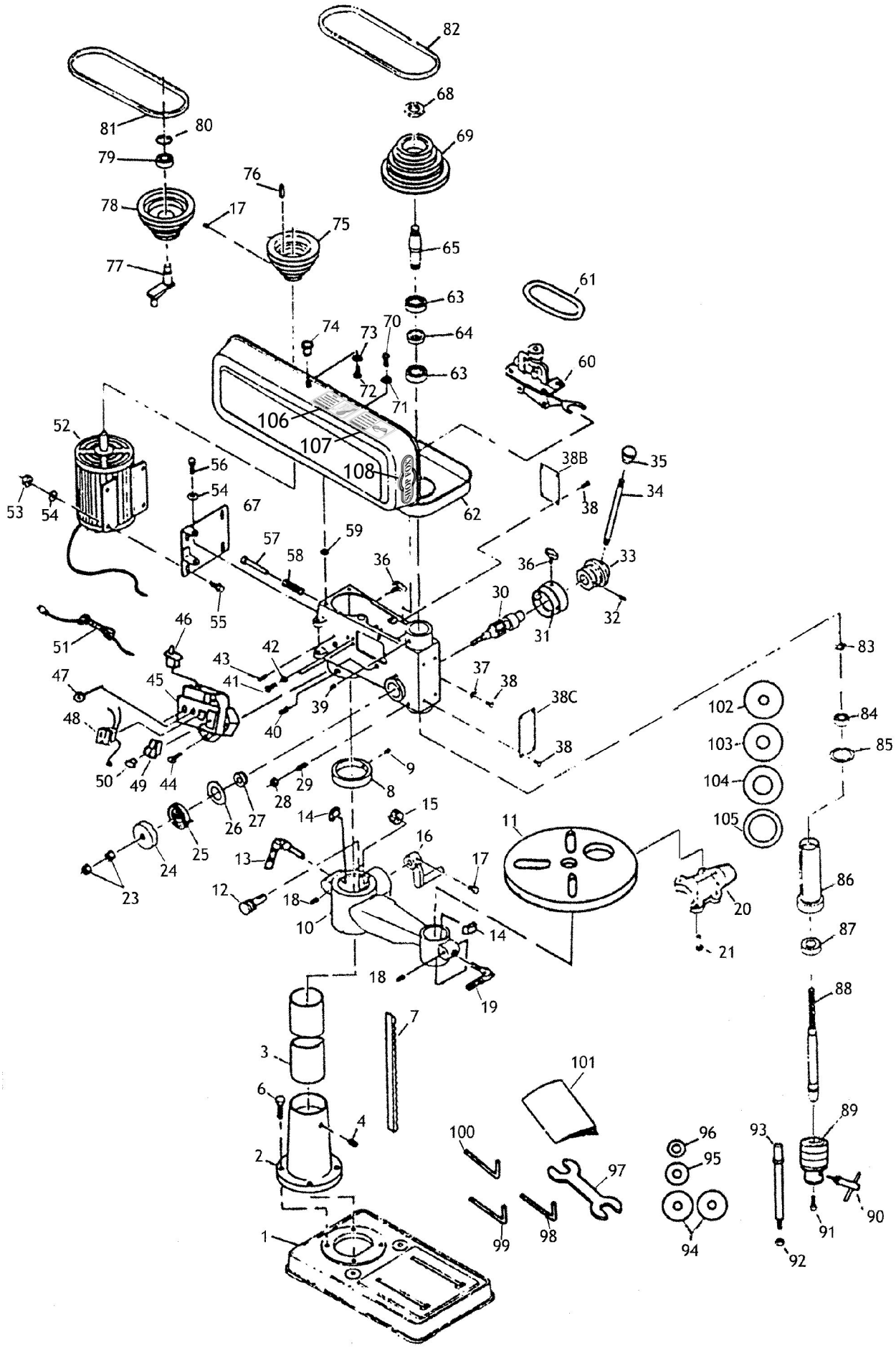
⚠WARNING

As with all power tools, there is danger associated with the Model W1668 Drill Press. Use the tool with respect and caution to lessen the possibility of mechanical damage or operator injury. If normal safety precautions are overlooked or ignored, injury to the operator or others in the area is likely.

The Model W1668 was specifically designed for drilling and drum sanding operations. **DO NOT MODIFY AND/OR USE THIS DRILL PRESS FOR ANY OTHER PURPOSE. MODIFICATIONS OR IMPROPER USE OF THIS TOOL WILL VOID THE WARRANTY.** If you are confused about any aspect of this machine, **DO NOT** use it until you have answered all your questions.

⚠WARNING

Keep your shop "Kid Safe". Always remove the switch safety key when drill press is not in use. Serious injury may occur.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REF	PART #	DESCRIPTION
01	X1668001	BASE
02	X1668002	COLUMN FLANGE
03	X1668003	COLUMN
04	X1668004	TABLE BRACKET
06	XPB32M	HEX BOLT M10-1.5 X 25
07	X1668007	RACK
08	X1668008	COLUMN RING
09	XPSS01M	SET SCREW M6-1.0 X 10
10	X1668010	TABLE BRACKET
11	X1668011	TABLE
12	X1668012	WORM PINION
13	X1668013	LOCK HANDLE M10
14	X1668014	LOCK SHOE
15	X1668015	WORM GEAR
16	X1668016	LIFT HANDLE
17	XPSS01M	SET SCREW M6-1.0 X 10
18	XPSS22M	SET SCREW M4-0.7 X 12
19	X1668019	LOCK HANDLE M8
20	X1668020	DUST PORT
21	XPS33M	PHLP HD SCR M4-0.7 X 22
22	X1668022	HEAD CASTING
23	XPN02M	HEX NUT M10-1.5
24	X1668016	SPRING COVER
25	X1668025	RETURN SPRING
26	X1668026	SPRING WASHER
27	X1668027	BUSHING
28	XPN01M	HEX NUT M6-1.0
29	X1668029	SPECIAL SET SCREW
30	X1668030	FEED SHAFT
31	X1668031	DEPTH COLLAR
32	XPRP07M	ROLL PIN 6MM X 20
33	X1668033	FEED COLLAR
34	X1668034	HANDLE BAR
35	X1668035	KNOB
36	X1668036	LOCK KNOB
37	X1668037	POINTER
38	X1668038	RIVET
38C	X1668038C	DEPTH CHART
39	XPSS16M	SET SCREW M8-1.25 X 10
40	XPSS13M	SET SCREW M10-1.5 X 12
41	XPS32M	PHLP HD SCR M4-0.7 X 10
42	X1668042	STAR WASHER
43	XPRP07M	ROLL PIN 6MM X 20
44	XPS32M	PHLP HD SCR M4-0.7 X 10
45	X1668045	SWITCH BOX
46	X1668046	LIMIT SWITCH
48	X1668048	STRAIN RELIEF
49	X1668049	SAFETY SWITCH
50	X1668050	SWITCH KEY
51	X1668051	POWER CORD
52	X1668052	MOTOR 3/4 HP
53	XPN03M	HEX NUT M8-1.25
54	XPW01M	FLAT WASHER M8

REF	PART #	DESCRIPTION
55	XPB07M	HEX BOLT M8-1.25 X 25
56	XPB09M	HEX BOLT M8-1.25 X 20
57	X1668057	PUSH ROD
58	X1668058	SPRING
59	X1668059	RUBBER WASHER
60	X1668060	OSCILLATING MECHANISM
61	X1668061	ROUND DRIVE BELT
62	X1668062	PULLEY COVER
63	XP6203	BALL BEARING 6203
64	X1668064	COLLAR
65	X1668065	INTERNAL SPLINE SLEEVE
67	X1668067	MOTOR MOUNT
68	X1668068	LOCK NUT
69	X1668069	SPINDLE PULLEY
70	XPS31M	PHLP HD SCR M6-1.0 X 20
71	XPLW03M	LOCK WASHER 6MM
72	XPS09M	PHLP HD SCR M5-0.8 X 10
73	XPW02M	FLAT WASHER 5MM
74	X1668074	KNOB
75	X1668075	IDLER PULLEY
76	X1668076	KEY
77	X1668077	IDLER ARM
78	X1668078	IDLER PULLEY
79	XP6202	BALL BEARING 6202
80	X1668080	RETAINING RING
81	XPW01M	MOTOR V-BELT
82	X1668082	SPINDLE V-BELT
83	X1668083	RETAINING RING
84	XP6201	BALL BEARING 6201
85	X1668085	RUBBER WASHER
86	X1668086	QUILL
87	XP6204	BALL BEARING 6204
88	X1668088	SPINDLE
89	X1668089	DRILL CHUCK
90	X1668090	CHUCK KEY
91	XPSB15M	CAP SCREW M5-0.8 X 20
92	XPN03M	HEX NUT M8-1.25
93	X1668093	MANDREL
94	X1668094	MANDREL WASHER 1 3/4"
95	X1668095	MANDREL WASHER 7/8"
96	X1668096	MANDREL WASHER 3/4"
97	X1668097	OPEN END WRENCH
98	XPW03M	3mm ALLEN® WRENCH
99	XPW04M	4mm ALLEN® WRENCH
100	XPW04M	5mm ALLEN® WRENCH
101	X1667MANUAL	MANUAL
102	X1668102	TABLE INSERT 5/8"
103	X1668103	TABLE INSERT 1"
104	X1668104	TABLE INSERT 1 3/8"
105	X1668105	TABLE INSERT 1 7/8"
106	X1668106	LONG HAIR SAFETY LABEL
107	X1668107	GLASSES SAFETY LABEL
108	X1668108	MACHINE LABEL

NOTES:

WARRANTY CARD

Name _____

Street _____

City _____State_____Zip_____

Phone Number_____E-Mail_____FAX_____

MODEL # _____

The following information is given on a voluntary basis and is strictly confidential.

1. Where did you purchase your Shop Fox® machine?
   Store?_____City?_____

2. How did you first learn about us?

   ___Advertisement
   ___Friend
   ___Mail order Catalog
   ___Local Store
   ___World Wide Web Site

   ___Other_____

3. Which of the following magazines do you subscribe to.

   ___American Woodworker
   ___Today's Homeowner
   ___Cabinetmaker
   ___WOOD
   ___Family Handyman
   ___Wooden Boat
   ___Fine Homebuilding
   ___Woodshop News
   ___Fine Woodworking
   ___Woodsmith
   ___Home Handyman
   ___Woodwork
   ___Journal of Light Construction
   ___Woodworker
   ___Old House Journal
   ___Woodworker's Journal
   ___Popular Mechanics
   ___Workbench
   ___Popular Science
   ___American How-To
   ___Popular Woodworking
   ___Other_____

4. Which of the following woodworking/remodeling shows do you watch?

   ___Backyard America
   ___The New Yankee Workshop
   ___Home Time
   ___This Old House
   ___The American Woodworker
   ___Woodwright's Shop
   ___Other_____

5. What is your annual household income?

   ___$20,000-$29,999
   ___$60,000-$69,999
   ___$30,000-$39,999
   ___$70,000-$79,999
   ___$40,000-$49,999
   ___$80,000-$89,999
   ___$50,000-$59,999
   ___$90,000 +

6. What is your age group?

   ___20-29
   ___50-59
   ___30-39
   ___60-69
   ___40-49
   ___70 +

7. How long have you been a woodworker?

   ___0 - 2 Years
   ___8 - 20 Years
   ___2 - 8 Years
   ___20+ Years

8. How would you rank your woodworking skills?

   ___Simple
   ___Advanced
   ___Intermediate
   ___Master Craftsman

9. How many Shop Fox® machines do you own? _____

10. What stationary woodworking tools do you own? Check all that apply.

    ___Air Compressor
    ___Panel Saw
    ___Band Saw
    ___Planer
    ___Drill Press
    ___Power Feeder
    ___Drum Sander
    ___Radial Arm Saw
    ___Dust Collector
    ___Shaper
    ___Horizontal Boring Machine
    ___Spindle Sander
    ___Jointer
    ___Table Saw
    ___Lathe
    ___Vacuum Veneer Press
    ___Mortiser
    ___Wide Belt Sander
    ___Other_____

11. Which benchtop tools do you own? Check all that apply.

    ___1" x 42" Belt Sander
    ___6" - 8" Grinder
    ___5" - 8" Drill Press
    ___Mini Lathe
    ___8" Table Saw
    ___10" - 12" Thickness Planer
    ___8" - 10" Bandsaw
    ___Scroll Saw
    ___Disc/Belt Sander
    ___Spindle/Belt Sander
    ___Mini Jointer
    ___Power Tools
    ___Other_____

12. Which portable/hand held power tools do you own? Check all that apply.

    ___Belt Sander
    ___Orbital Sander
    ___Biscuit Joiner
    ___Palm Sander
    ___Circular Saw
    ___Portable Planer
    ___Detail Sander
    ___Saber Saw
    ___Drill/Driver
    ___Reciprocating Saw
    ___Miter Saw
    ___Router
    ___Other_____

13. What machines/supplies would you like to see?

    ___12" Table Saw
    ___Radial Arm Saw
    ___12" Jointer
    ___Panel Saw
    ___Combination Planer/Jointer
    ___Brass Hardware
    ___Paint & Finnish Supplies
    ___Lumber
    ___Contractor's Supplies
    _____other_____

14. What new accessories would you like Woodstock International to carry?
    _____
    _____

15. Do you think your purchase represents good value?

    ___Yes
    ___No

16. Would you recommend Shop Fox® products to a friend?

    ___Yes
    ___No

17. Comments:_____
    _____
    _____
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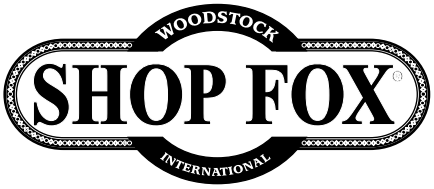

WOODSTOCK INTERNATIONAL, INC.
P.O. BOX 2309
BELLINGHAM, WA 98227-2309

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